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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,185	08/23/2001	Charles W. Propst Jr	TPP 30482 A	9479

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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/914,185

Applicant(s)

PROPST JR, CHARLES W.

Examin r

Christopher P Bruenjes

Art Unit

1772

-- The MAILING DATE of this communication appears on th cover sheet with th correspond nce address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 16, 2003 has been entered.

***WITHDRAWN REJECTIONS***

2. The 35 U.S.C. 102 rejections of claims 1-3 as being anticipated by Felter et al of record in Paper #4, Pages 3-4 Paragraph 3 have been withdrawn due to applicant's amendment in Paper #10.

3. The 35 U.S.C. 103 rejection of claim 4 over Felter in view of Shaw of record in Paper #4, Pages 5-6 Paragraph 5 have been withdrawn due to Applicant's amendment in Paper #10.

**REPEATED REJECTIONS**

4. The 35 U.S.C. 103 rejections of claims 5-7 over Arudi in view of Felter is repeated for the reasons previously of record in Paper #4, Pages 6-7 Paragraph 6.

5. The 35 U.S.C. 103 rejection of claim 8 over Arudi in view of Felter as applied to claim 5 and in further view of Shaw is repeated for the reasons previously of record in Paper #4, Pages 7-8 Paragraph 7.

6. The 35 U.S.C. 103 rejections of claims 10-13 over Hamuro et al in view of Felter are repeated for the reasons previously of record in Paper #4, Pages 8-9 paragraph 8.

7. The 35 U.S.C. 103 rejection of claim 14 over Hamuro in view of Felter as applied to claim 10 and in further view of Shaw is repeated fro the reasons previously of record in Paper #4, Pages 9-10 Paragraph 9.

**NEW REJECTIONS**

**Claim Rejections - 35 USC § 102**

Art Unit: 1772

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Berbeco (USPN 4,596,668).

Berbeco anticipates a self-sustaining film that can be extruded into antistatic mats, rods, or cables (col.4, 1.1-8). The film comprises a composition including an acrylic resin base, which is a methylmethacrylate containing polymer (col.2, 1.55-65). The composition further comprises 0.1 to 20wt% based on the weight of the self-sustaining film of antistatic agent (col.2, 1.20-30) to impart a static dissipative property and a conductive property to the film. The antistatic agent is a quaternary ammonium compound (col.3, 1.3-20). The film further comprises a polyethylene wax emulsion (col.3, 1.58-62).

9. Claims 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (USPN 4,379,822).

Shaw anticipates a paper layer or base coated with a conductive polymeric composition or barrier coat consisting of a

Art Unit: 1772

hydrophobic thermoplastic film-forming resin having labile hydrogen-containing functional groups and a conductive agent, which is a quaternary ammonium compound (see abstract). The film forming resin or colloiddally dispersible film former of the composition is formed of methyl methacrylate/acrylic acid copolymer (col.5, 1.34). The conductive agent is added to the composition in an amount between 2 and 25% based on the weight of the composition (col.7, 1.15-28). Shaw also teaches that a polyethylene wax emulsion is added to the acrylic resin base containing quaternary ammonium compound (col.2, 1.52-62). The coated paper layer optionally comprises a zinc oxide coating, which is a dispersion of zinc oxide particles onto the barrier coating (col.6, 1.19-40).

10. Claims 5 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Keough (USPN 4,623,594).

Keough anticipates a package for electronic devices (col.4, 1.65-68) composed of paper, fabric, non-woven material, or metallized substrates coated with an antistatic coating (col.3, 1.42-58). The antistatic coating consists of an acrylic resin base (col.2, 1.49-68) and an antistatic agent, including quaternary ammonium compounds (col.3, 1.28-40). Keough also teaches that the exact amount of quaternary ammonium compound

Art Unit: 1772

added to the polymer will vary from resin to resin, antistatic agent to antistatic agent, and intended use for the resulting product (col.3, 1.40-47). However, Keough also teaches specific examples in which the quaternary ammonium compound is added in an amount of 5, 10, or 15 wt% based on the with of the composition (col.5, 1.5-55).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1772

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berbeco (USPN 4,596,668) in view of Felter et al (USPN 4,895,886).

Berbeco teaches all that is claimed in claim 1 as shown above, but fails to explicitly teach the self-sustaining film further comprising a dispersion of zinc oxide particles. However, Felter et al teach a static dissipative composition including acrylic resin base and quaternary ammonium compounds of choline and another quaternary ammonium long chain antistat, in which a dispersion of silica or zinc oxide particles are added in order to stabilize the composition by preventing phase separation of antistatic agents (col.2, 1.63-65). One of ordinary skill in the art would have recognized that both Berbeco and Felter et al are teaching conductive and static dissipative compositions and that zinc oxide particles are added to conductive and static dissipative compositions in order to stabilize the composition by preventing phase separation of the antistatic agents, as taught by Felter et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add a dispersion of zinc oxide particles to the conductive and static dissipative composition of Berbeco in



Art Unit: 1772

order to stabilize the conductive and static dissipative composition, as taught by Felter et al.

12. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keough (USPN 4,623,594) in view of Felter et al (USPN 4,895,886).

Keough teaches all that is claimed in claims 5 and 10 as shown above, but fails to explicitly teach the package or paper coated layer of the package further comprising a dispersion of zinc oxide particles. However, Felter et al teach a static dissipative composition including acrylic resin base and quaternary ammonium compounds of choline and another quaternary ammonium long chain antistat, in which a dispersion of silica or zinc oxide particles are added in order to stabilize the composition by preventing phase separation of antistatic agents (col.2, 1.63-65). One of ordinary skill in the art would have recognized that both Keough and Felter et al are teaching conductive and static dissipative compositions and that zinc oxide particles are added to conductive and static dissipative compositions in order to stabilize the composition by preventing phase separation of the antistatic agents, as taught by Felter et al.

Art Unit: 1772

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add a dispersion of zinc oxide particles to the conductive and static dissipative composition of Keough in order to stabilize the conductive and static dissipative composition, as taught by Felter et al.

13. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keough (USPN 4,623,594) in view of Shaw (USPN 4,379,822).

Keough teaches all that is claimed in claims 5 and 10 and teaches that the substrate in which the antistatic agent is coated can be a polymer coated paper (col.3, 1.48-55), but fails to explicitly teach adding a polyethylene wax emulsion to the package or paper coated layer of the package. However, Shaw teaches that a polyethylene wax emulsion is added to an acrylic resin base containing quaternary ammonium compound to make the film water resistant or hydrophobic (col.2, 1.52-62). One of ordinary skill in the art would have recognized that Shaw and Keough teach coated paper layers that are coated with an antistatic or conductive resin comprising an acrylic resin base and quaternary ammonium compound.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add polyethylene wax emulsion to the antistatic or conductive resin of Keough in order to make the film water resistant or hydrophobic when applied to the paper layer, as taught by Shaw.

***ANSWERS TO APPLICANT'S ARGUMENTS***

14. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 1-3 as being anticipated by Felter have been considered but are moot since the rejections have been withdrawn.

15. Applicant's arguments regarding the 35 U.S.C. 103 rejection of claim 4 over Felter in view of Shaw have been considered but are moot since the rejections have been withdrawn.

16. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 5-7 over Arudi in view of Felter have been fully considered but they are not persuasive.

In response to applicant's argument that Felter does not teach the limitations of the claim because Felter requires choline methosulfate and the claim requires that the composition

consists of an acrylic base resin and 1-10 wt% quaternary ammonium compound based on the weight of the composition, the definition of quaternary ammonium compound is any group of compounds in which a central nitrogen atom is joined to four organic radicals and one acid radical (see The American Heritage Dictionary of the English Language). Choline methosulfate is a compound that fits that definition (col.2, 1.20-27) and therefore is a quaternary ammonium compound. Furthermore, Felter also teaches that other antistats such as choline hydroxide, choline chloride, 2,3-epoxy propyl trimethylammonium chloride, 3-chloro-2-hydroxy propyl trimethyl ammonium chloride, and 3-trimethyl ammonium-1-propanol methyl sulfate, which are also quaternary ammonium sulfates, are substituted for choline methosulphate (col.2, 1.28-41). Therefore, Felter teaches a composition consisting of an acrylic base resin and about 10 to about 15wt% of quaternary ammonium compound in the form of a choline compound and a long chain compound (col.3, 1.35-40). Felter further teaches that the composition also consists of 3 to 6% of an inorganic particulate such as silica or zinc oxide particles (col.2, 1.63-65). Therefore, Felter in combination with Arudi meets all of the limitations of claims 5-7.

Art Unit: 1772

17. Applicant's arguments regarding the 35 U.S.C. 103 rejection of claim 8 over Arudi in view of Felter as applied to claim 5 and in further view of Shaw have been fully considered but they are not persuasive.

In response to Applicant's argument that Felter does not teach the limitations of the claim because Felter requires choline methosulfate and the claim requires that the composition consists of an acrylic base resin and 1-10 wt% quaternary ammonium compound based on the weight of the composition, see above for the response to the applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 5-7.

18. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 10-13 over Hamuro in view of Felter have been fully considered but they are not persuasive.

In response to Applicant's argument that Felter does not teach the limitations of the claim because Felter requires choline methosulfate and the claim requires that the composition consists of an acrylic base resin and 1-10 wt% quaternary ammonium compound based on the weight of the composition, see above for the response to the applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 5-7.

Art Unit: 1772

19. Applicant's arguments regarding the 35 U.S.C. 103 rejection of claim 14 over Hamuro in view of Felter as applied to claim 10 and in further view of Shaw have been fully considered but they are not persuasive.

In response to Applicant's argument that Felter does not teach the limitations of the claim because Felter requires choline methosulfate and the claim requires that the composition consists of an acrylic base resin and 1-10 wt% quaternary ammonium compound based on the weight of the composition, see above for the response to the applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 5-7.

#### **Conclusion**

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Havens et al (USPN 5,064,699); Roberts et al (USPN 5,096,761); Roberts et al (USPN 5,171,641); Nagamatsu (USPN 5,846,621).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

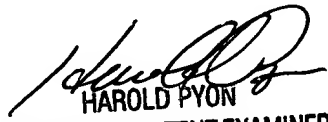
Art Unit: 1772

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB   
October 8, 2003

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

10/17/03